ITEM 660.29XX M CORPORATION STOP AND CONNECTION

DESCRIPTION

Work shall consist of the installation of a new corporation stop as shown on the plans and as directed by Resident Engineer.

REFERENCES

ANSI/AWWA C800 - Underground Service Line Valves and Fittings.

ANSI/AWWA C901 - Polyethylene (PE) Pressure Pipe and Tubing for 1/2-inch through 3-inch, for Water Service.

ASTM B88 - Standard Specification for Seamless Copper Water Tube.

DEFINITIONS

Corporation Stop: Valve connecting service line to water main and used to stop flow of water during installation or maintenance of service line.

Tapping Saddle: Fitting that attaches circumferentially to water main to provide attachment for a corporation. Used for all 38 mm and 51 mm taps on 102 mm through 305 mm ductile iron and cast iron mains and all size service taps on all sizes of PVC and asbestos cement water mains.

Compression Joint: Grip or pack joint for copper and plastic tubing and pack joint with set screw for galvanized pipe.

MATERIALS

Size of corporation stop and coupling shall be the same size as existing service pipe, with minimum size being 25 millimeters.

CORPORATION STOPS (25 MM)

MATERIAL

Fabricated from metal alloy red brass 85-5-5-5 (85-percent copper, 5-percent each tin, lead, zinc) in accordance with chemical and mechanical requirements of ASTM B62, with ground key, ball or cylinder plug construction, AWWA CC inlet threads and compression outlet.

Manufacturers

1. A.Y. McDonald: 4701-BT or 4701-22
2. Ford: F1000-3, F1000-4, FB1000-3 or FB1000-4
3. Hays: 4400CF or CJ, 5200CF or CJ
4. Jones: J-3401

5. Mueller: H-15008 or B-25008

CORPORATION STOPS (38 MM, 38 MM X 51 MM AND 51 MM):

MATERIAL

Fabricated from metal alloy red brass 85-5-5-5 in accordance with chemical and mechanical requirements of ASTM B62, ground key, ball or cylinder plug valve type with AWWA CC inlet and iron pipe male outlet threads.

Manufacturers:

1. A.Y. McDonald: 3128-B
2. Ford: FB-800-5, FB-800-6, FB400-6 or FB400-7
3. Hays: 4481
4. Mueller: H-9996 or H-10003

SERVICE SADDLES FOR SERVICES ON DUCTILE IRON, CAST IRON AND ASBESTOS CONCRETE MAINS

MATERIAL

Body: metal alloy red brass 85-5-5-5 in accordance with chemical and mechanical requirements of ASTM B-62 and AWWA C800. Strap nuts fabricated of the same brass alloy, with straps made of flattened silicon bronze.

Outlet: AWWA Standard CC female thread.

Gasket: BUNA-N rubber, as per ASTM-D2000 80M5 BG506.

Manufacturers:

1. Ford: 202-B
2. Jones: J-979
3. Mueller: H-16123 through H-16137
4. Smith Blair: 323
5. Romac: 202-B

SERVICE SADDLES FOR SERVICES ON PVC MAINS

MATERIALS

Body: Ductile iron conforming to ASTM 536-71 with anti-corrosive paint, or bronze conforming to ASTM B584 and B62; with two teflon coated 18-8 type 304 stainless steel straps, with teflon coated stainless steel nuts.

Outlet: AWWA Standard CC female thread.

Gasket: BUNA-N rubber, as per ASTM-D2000 80M5 BG506.

Manufacturers for 51 mm to 305 mm pipe:

1. Smith Blair: 393
2. Cascade: CBS2
3. JCM: 406
4. Romac: 202S

DEFECTIVE TAP REPAIR SLEEVE

MATERIALS

Body: constructed with 18-8 (type 304) stainless steel, with all accessories made of stainless steel.

Gaskets: virgin SBR material, formulated for water use.

Manufacturers:

1. JCM: 131, or 132
2. Ford: FS-1, or FS-2
3. Cascade: CR-1, or CR-2
4. Power Seal: 3121-AS, or 3122-AS
5. Romac: SS-1, or SS-2

BEDDING, BACKFILL AND SURFACE RESTORATION

Bedding, backfill, and surface restoration materials and method of placement shall conform to requirements of MCDOT Item Specification 660.06XXXX and NYSDOT Standard Specifications, Section 203, latest revision.

CONSTRUCTION DETAILS

GENERAL

Verify that a Notice from Health Department has been submitted, in writing, to MCWA stating that the health sample for distribution main is satisfactory.

Verify location and disposition of all water services before beginning work. Ensure that all labor, equipment and materials are on site prior to replacement or transfer of service.

The Monroe County Water Authority (MCWA) shall be notified at least two (2) working days in advance of doing any work.

Prior to any disruption of service, all affected water service customers shall be notified by

the Contractor at least 24 hours in advance of disruption and if necessary shall be provided with temporary water service.

Records of all new, replaced and transferred water services shall be obtained. Such records shall identify for each service the address and coordinate location of the service, material used, length, depth and size of new copper service, and location of the corporation stop and curb stop. This information shall be recorded on standard water service cards, obtained from MCWA, and submitted to MCWA's project representative, 475 Norris Drive, Rochester, New York 14610.

INSTALLATION

Pavement saw cutting shall be required prior to all water service work, except in areas of reconstruction. All street cuts shall be made by a pavement saw and shall conform to requirements of MCDOT Item Specification 502.5014.

Water main shall be exposed at location where the tap is to be made or service abandoned. Excavation shall conform to requirements of NYSDOT Standard Specifications, Section 206, latest revision.

Upon completion of the work, backfill excavation and restore disturbed surface area.

Service Tap at Main:

Use direct tapped connections for all 25 mm taps on ductile iron pipe. Use service saddles for all 38 mm and 51 mm connections on 305 mm, or less, ductile iron pipe.

Use tapping saddles for all tapped connections on PVC and asbestos cement pipe.

Use threadolet adapters for all tapped connections 51 mm and smaller on steel pipe.

Install all service materials, including corporation and curb stop at a minimum depth of cover of 1.5 m.

Tap shall be made in accordance with requirements of ANSI/AWWA C600. Install corporation stops in upper half of main at a 22-1/2 degree angle with horizontal axis (spring line) of main and on same side of main as consumer. Use only equipment specially designed for this purpose and that is in good working condition. When drilling, care shall be taken to completely cut through the pipe wall. Installation of corporation stop shall be made watertight. Backfilling of trench shall be done in a manner so as to avoid damage to new corporation stop.

Repair all defective service taps with stainless steel split sleeve repair clamps. Do not retap main within 305 mm of repair clamp.

When installing services on a polyethylene encased main, tightly wrap the main with two

(2) layers of 8 mil polyethylene adhesive tape for 305 mm each side of proposed tap location. After corporation has been installed, repair any cuts or scrapes to the polyethylene encasement or tape to prevent exposure of water main to the soil. Tape shall conform to the requirements of the manufacturer of the polyethylene tube.

METHOD OF MEASUREMENT

Quantity to be measured under this item shall be number of water service taps and installations made.

BASIS OF PAYMENT

GENERAL - ALL ITEMS

Unit price bid shall include cost of: preparation and submittal of service record information and cards; pavement saw cutting; and furnishing all labor, material and equipment necessary to complete the work.

SERVICE TAP AT MAIN

Unit price bid shall include cost of: making tap at main; furnishing and installing corporation stop; service saddles where required; and connection of water service to corporation stop.

EXCAVATION, BACKFILL AND SURFACE RESTORATION

Excavation including rock excavation, furnishing and placing of bedding, and select granular backfill and surface restoration will be included in price bid for each item as indicated in item description.

Payment will be made under:

Item No.	Item	Pay Unit
660.2903 M	Corporation Stop and Connection, 25 mm Diameter Service (Including Excavation, Backfill and Surface Restoration)	EA
660.2904 M	Corporation Stop and Connection, 51 mm Diameter Service (Including Excavation, Backfill and Surface Restoration)	EA